

EPA Registration No.  
70506-93  
vol. 2

# MATERIAL TO BE ADDED TO JACKET

REG #

70506-93

Description:

Amended CSF

check all that apply	
<input type="checkbox"/>	new stamped accepted label
<input checked="" type="checkbox"/>	new CSF
<input type="checkbox"/>	notification

Send to CSC

## Instructions:

Attach this sheet to the top of **ALL** material sent to the file room (both loose paper and new material in jackets). This sheet will be imaged; a clear description will aid in finding material in the e-jacket. Remove staples from all material. If returning loose paper then hold together with a binder or paper clip. CSFs should be placed in the CSF folder (if returning jacket) or covered with a red CBI sheet (if returning loose paper). Material to be returned to file room should be place in the appropriate bin.

Reviewer's  
Name:

Jim Stone

Date:

11/30/07

Phone:

305-7391

Division:

RD/HB



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

30

United Phosphorus Inc.  
c/o N. Bhushan Mandava Ph.D.  
Mandava Associates, LLC  
1730 M Street NW  
Washington, DC 20036

Gentlemen:

Subject: New Source of Active Ingredient  
Clopyralid Technical  
EPA Registration No. 70506-93  
Your applications Dated July 9, 2007 and August 31, 2007

The subject alternate formula is acceptable and has been included in the files for this product.

If you have any questions concerning this letter please contact Mr. James Stone at 703-305-7391.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Kathryn V. Montague".

Kathryn V. Montague  
Acting Product Manager (23)  
Herbicide Branch  
Registration Division (7505P)

FEE

DATE: 10/23/07

SUBJECT: Product Chemistry Review of CLOPYRALID TECHNICAL

FROM: *ed 10/23/07*  
Indira Gairola  
Product Chemistry Team  
Technical Review Branch/RD (7505P)

TO: Joanne Miller/James Stone PM 23  
Herbicide Branch/RD (7505P)

DP BARCODE No.: 342015

File Symbol No.: 70506-93

COMPANY: UNITED PHOSPHORUS INC.

PCC: 117403

Decision No. 381191

Chemical Name: (IUPAC, ANSI, etc.) Clopyralid

CAS No. 1702-17-6

USE: Herbicide

*SJBW 10.23-07*

#### INTRODUCTION:

UNITED PHOSPHORUS INC. has submitted Product Chemistry Guideline reference 830 Subgroup A & B data to support the registration of new alternate source of active ingredient Clopyralid Technical.

Details are listed below:

#### SUMMARY OF FINDINGS:

1. Applicant UNITED PHOSPHORUS INC. has submitted MRID#s 471788-01,-03,-04,-05,-06, -07 and 471834-01 for Product Chemistry data to support the aforementioned registration of Clopyralid Technical.
2. The submitted package was reviewed and details of product chemistry data will be discussed in the following Pages:
3. The Alternate source Formulation CSF dated 07/09/07 is filled out completely and correctly.
4. The certified limits are in compliance with 40 CFR158.175 (b) (2).

5. Average recovery of Clopyralid Technical ranged from acceptable level of 96.31%-97.04% Mean Average =96.85%.

#### CONCLUSIONS :

TRB has reviewed the product chemistry data submitted for the above mentioned subject product and has concluded that:

1. Product Chemistry data requirements for subgroup A are satisfactory and fulfill the requirement of OPP test guidelines.
2. Certified limits are in compliance with 40CFR.175 (b) (2). See CONFIDENTIAL APPENDIX.
3. Average recovery of Clopyralid Technical ranged from acceptable level of 96.31%-97.04% Mean Average =96.85%.
4. Alternate source Formulation CSF dated 07/09/07 is acceptable.
5. The impurity profile for the Alternate source Formulation CSF dated 07/09/07 is identical to the Basic Formulation CSF dated 01/15/03.
6. Product Chemistry data requirements for subgroup B completely fulfill the requirement of OPP test guidelines.

**Sub Group 'A' Guidelines Series 830.1550-1800**  
**DP BAR CODE: 342015 File Symbol No.: 70506-93**  
**PRODUCT NAME: CLOPYRALID TECHNICAL**

Table 1: Manufacturing and Impurity Data for DICAMBA TECHNICAL				
GLN	Requirement	MRID	Status <sup>1</sup>	Details and/or Deficiency <sup>2</sup>
830.1550	Product Identity & Disclosure of Ingredients		A	07/09/07
830.1600 830.1620 830.1650	Starting Materials & Manufacturing Process		A	MRID # 471788-01
830.1670	Discussion of Impurities		A	MRID # 471788-01
830.1700	Preliminary Analysis		A	MRID # 471788-01
830.1750	Certification of Limits		A	07/09/07
830.1800	Analytical Methods		A	MRID # 471834-01
<sup>1</sup> A = Acceptable; N = Unacceptable (see Deficiency); N/A = Not Applicable. <sup>2</sup> Refer to CBI Appendix A for details.				

Table 2: Physical and Chemical Properties for CLOPYRALID TECHNICAL Reg. # 70506-93

GLN	Requirement	MRID.	Status <sup>1</sup>	Result <sup>2</sup> or Deficiency
830.6302	Color	471788-07	A	Off white
830.6303	Physical State	471788-07	A	Solid (powder)
830.6304	Odor	471788-07	A	Odorless
830.6313	Stability		N/A	Not determined since it is an alternate source.
830.6314	Oxidation / Reduction		N/A	Not determined since it is an alternate source.
830.6315	Flammability	NA	NA	Not flammable
830.6316	Explosibility		N/A	
830.6317	Storage Stability	NA	NA	
830.6319	Miscibility	NA	NA	
830.6320	Corrosion Characteristics	NA	NA	
830.7000	pH	471788-07	A	1.75 (10% soln. in water)
830.7050	UV/Visible Absorption		N/A	Not determined since it is an alternate source.
	Viscosity	NA	NA	It is solid
830.7200	Melting Point/ Melting Range	471788-07	A	151-152°C
830.7220	Boiling Point/ Boiling Range	NA	NA	
830.7300	Density/ Relative Density/ Bulk Density	471788-07	A	Pour 0.46g/mL @25 °C, Relative density 1.58 @20°C
830.7370	Dissociation Constant in Water	471788-07	N/A	Not determined since it is an alternate source.
830.7550	Partition Coefficient (Octanol/Water)			Log <sub>10</sub> K <sub>OW</sub> @ 20 °C
830.7840	Solubility	471788-07		143 g/L in water. @pH7, @20 °C, 12.2 in Acetonitrile, 10.6 methanol, 0.6 Hexane, 39.6 N-Methyl pyrrolidone, 13.1 Octanol @ 20 °C
830.7950	Vapor Pressure	471788-07		1.35 m Pa @25 °C
<sup>1</sup> A = Acceptable; N = Unacceptable (see Deficiency); N/A = Not applicable, I = incomplete				

**Product Identity** [OPPTS Guideline 830.1500 (OPP Guideline 61-1)]

Information on the product identity and composition of the pesticide product is covered under 40 CFR §158.155. The information required, among others, includes the source (if applicable), chemical and common names, CAS Registry Number and the identity of each ingredient in the Technical Grade of the Active Ingredient (TGAI) if it is a mixture.

The following information is provided to satisfy this guideline requirement:

**Product Identity and Composition** [40 CFR §158.155; OPPTS Guideline 830.1550 (OPP Guideline 61-1)]

Common Name: Clopyralid (ISO Draft, ANSI and BSI)

Chemical name: 3,6-Dichloro-2-pyridinecarboxylic acid (CAS)

Synonyms: 3,6-Dichloropicolinic acid (IUPAC)  
3,6-Dichloropyridine-2-carboxylic acid

Experimental Code: None

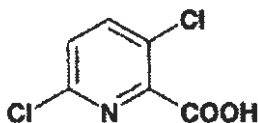
CAS Reg. No.: 1702-17-6

EPA Chemical Code: 117403

Molecular Formula:  $C_6H_3Cl_2NO_2$

Molecular Weight: 192

Chemical Structure:



**SUB GROUP A**



I MANUFACTURING PROCESS (830.1620):

For details please refer to the CONFIDENTIAL APPENDIX.

II DISCUSSION OF FORMATION OF IMPURITIES (830.1670):

This portion will be discussed in CONFIDENTIAL APPENDIX

III PRELIMINARY ANALYSES 830.1700. This portion will be discussed in CONFIDENTIAL APPENDIX

IV CERTIFIED LIMITS

Please refer to the CONFIDENTIAL APPENDIX for CSF.

V. ENFORCEMENT ANALYTICAL METHOD (830.1800)





# DATA PACKAGE BEAN SHEET

Date: 26-Jul-2007

Page 1 of 2

Decision #: 381191

DP #: (342015)

PRIA

Parent DP#:

## \*\*\* Registration Information \*\*\*

Registration: 70506-93 - AGVALUE CLOPYRALID TECHNICAL

Company: 70506 - UNITED PHOSPHORUS, INC

Risk Manager: RM 23 - Joanne Miller - (703) 305-6224 Room# PY1 S-7328

Risk Manager Reviewer: James Stone JSTONE

Sent Date: 23-Jul-2007

Calculated Due Date: 30-Nov-2007

Edited Due Date:

Type of Registration: Product Registration - Section 3

Action Desc: (R34) NON-FAST-TRACK (INCLUDES CHANGES TO PRECAUTIONARY LABEL STATEMEN

Ingredients: 117403, Clopyralid(96%)

## \*\*\* Data Package Information \*\*\*

Expedite: ☐ Yes ☒ No

Date Sent: 26-Jul-2007

Due Back:

DP Ingredient: 117403, Clopyralid

DP Title:

CSF Included: ☒ Yes ☐ No

Label Included: ☐ Yes ☒ No

Parent DP #:

Assigned To

Date In

Date Out

Organization: RD / TRB

Last Possible Science Due Date: 31-Oct-2007

Team Name: CHEM

Science Due Date:

Reviewer Name:

Sub Data Package Due Date:

Contractor Name:

## \*\*\* Studies Sent for Review \*\*\*

Printed on Page 2

## \*\*\* Additional Data Package for this Decision \*\*\*

No Additional Data Packages

## \*\*\* Data Package Instructions \*\*\*

Review product chemistry data to support new alternate unregistered source of active ingredient.

MRID	MRID Status	Citation Reference	Guideline
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	830.1750/Certified limits
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	830.1800/Enforcement analytical method
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	830.7560/Partition coefficient (n-octanol/water), generator column method
47178804		Desai, H. (2007) Appearance (Colour, Physical State and Odour) of Clopyralid Technical. Project Number: 6592. Unpublished study prepared by Jai Research Foundation. 25 p.	830.6302/Color
47178804		Desai, H. (2007) Appearance (Colour, Physical State and Odour) of Clopyralid Technical. Project Number: 6592. Unpublished study prepared by Jai Research Foundation. 25 p.	830.6303/Physical state
47178804		Desai, H. (2007) Appearance (Colour, Physical State and Odour) of Clopyralid Technical. Project Number: 6592. Unpublished study prepared by Jai Research Foundation. 25 p.	830.6304/Odor
47178805		Parmar, J. (2007) pH of Clopyralid Technical. Project Number: 6593. Unpublished study prepared by Jai Research Foundation. 27 p.	830.7000/pH of water solutions or suspensions
47178806		Desai, H. (2007) Tap Density of Clopyralid Purified. Project Number: 6661, CIPAC/MT/33. Unpublished study prepared by Jai Research Foundation. 24 p.	
47178807		Mandava, N. (2007) Clopyralid Technical: Group B - Physical and Chemical Properties. Project Number: UPL/CLOPYR/TECH/PC/3. Unpublished study prepared by United Phosphorus, Inc. 10 p.	111-222/
47178807		Mandava, N. (2007) Clopyralid Technical: Group B - Physical and Chemical Properties. Project Number: UPL/CLOPYR/TECH/PC/3. Unpublished study prepared by United Phosphorus, Inc. 10 p.	830.6302/Color
47178807		Mandava, N. (2007) Clopyralid Technical: Group B - Physical and Chemical Properties. Project Number: UPL/CLOPYR/TECH/PC/3. Unpublished study prepared by United Phosphorus, Inc. 10 p.	830.6303/Physical state
47178807		Mandava, N. (2007) Clopyralid Technical: Group B - Physical and Chemical Properties. Project Number: UPL/CLOPYR/TECH/PC/3. Unpublished study prepared by United Phosphorus, Inc. 10 p.	830.6304/Odor
47178807		Mandava, N. (2007) Clopyralid Technical: Group B - Physical and Chemical Properties. Project Number: UPL/CLOPYR/TECH/PC/3. Unpublished study prepared by United Phosphorus, Inc. 10 p.	830.6313/Stability to sunlight, normal and elevated temperatures, metals, and metal ions
47178807		Mandava, N. (2007) Clopyralid Technical: Group B - Physical and Chemical Properties. Project Number: UPL/CLOPYR/TECH/PC/3. Unpublished study prepared by United Phosphorus, Inc. 10 p.	830.6314/Oxidizing or reducing action
47178807		Mandava, N. (2007) Clopyralid Technical: Group B - Physical and Chemical Properties. Project Number: UPL/CLOPYR/TECH/PC/3. Unpublished study prepared by United Phosphorus, Inc. 10 p.	830.6315/Flammability
47178807		Mandava, N. (2007) Clopyralid Technical: Group B - Physical and Chemical Properties. Project Number: UPL/CLOPYR/TECH/PC/3. Unpublished study prepared by United Phosphorus, Inc. 10 p.	830.6317/Storage stability of product
47178807		Mandava, N. (2007) Clopyralid Technical: Group B - Physical and Chemical Properties. Project Number: UPL/CLOPYR/TECH/PC/3. Unpublished study prepared by United Phosphorus, Inc. 10 p.	830.6319/Miscibility
47178807		Mandava, N. (2007) Clopyralid Technical: Group B - Physical and Chemical Properties. Project Number: UPL/CLOPYR/TECH/PC/3. Unpublished study prepared by United Phosphorus, Inc. 10 p.	830.6320/Corrosion characteristics
47178807		Mandava, N. (2007) Clopyralid Technical: Group B - Physical and Chemical Properties. Project Number: UPL/CLOPYR/TECH/PC/3. Unpublished study prepared by United Phosphorus, Inc. 10 p.	830.6321/Dielectric breakdown voltage
47178807		Mandava, N. (2007) Clopyralid Technical: Group B - Physical and Chemical Properties. Project Number: UPL/CLOPYR/TECH/PC/3. Unpublished study prepared by United Phosphorus, Inc. 10 p.	830.7000/pH of water solutions or suspensions

MRID	MRID Status	Citation Reference	Guideline
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	63-0/Reports of Multiple phys/chem Characteristics
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.1550/Product Identity and composition
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.1600/Description of materials used to produce the product
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.1620/Description of production process
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.1650/Description of formulation process
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.1670/Discussion of formation of impurities
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.1700/Preliminary analysis
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.1750/Certified limits
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.1800/Enforcement analytical method
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.6302/Color
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.6303/Physical state
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.7560/Partition coefficient (n-octanol/water), generator column method
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	63-0/Reports of Multiple phys/chem Characteristics
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	830.1550/Product Identity and composition
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	830.1600/Description of materials used to produce the product
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	830.1620/Description of production process
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	830.1650/Description of formulation process
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	830.1670/Discussion of formation of impurities
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	830.1700/Preliminary analysis

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47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	63-0/Reports of Multiple phys/chem Characteristics
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.1550/Product Identity and composition
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.1600/Description of materials used to produce the product
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.1620/Description of production process
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.1650/Description of formulation process
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.1670/Discussion of formation of impurities
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.1700/Preliminary analysis
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.1750/Certified limits
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.1800/Enforcement analytical method
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.6302/Color
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.6303/Physical state
47178801		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/1. Unpublished study prepared by United Phosphorus, Inc. 109 p.	830.7560/Partition coefficient (n-octanol/water), generator column method
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	63-0/Reports of Multiple phys/chem Characteristics
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	830.1550/Product Identity and composition
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	830.1600/Description of materials used to produce the product
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	830.1620/Description of production process
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	830.1650/Description of formulation process
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	830.1670/Discussion of formation of impurities
47178803		Mandava, N. (2007) Clopyralid Technical: Group A - Product Identity, Composition and Analysis. Project Number: UPL/CLOPYR/TECH/PC/2. Unpublished study prepared by United Phosphorus, Inc. 35 p.	830.1700/Preliminary analysis



**Decision Information for 70506-93**

Decision Seq: 381191 Action Code: R34, NON-FAST-TRACK (INCLUDES CHANGES TO PRECAUTION ...)

FFS Start Date: 02-Aug-2007 Tentative Ind: No FFS Original Decision: ...

Due Date: 30-Nov-2007 FFS EUP Decision: ...

OPP Target Due Dt: ... FFS Sect3 Decision: ...

Negotiated Due Dt: ... Start/Stop Clock FQPA Clock: ...

Registrant: ... Days Elapsed: ...

Response Due Date: ...

Current Status: PENDING (16-Jul-2007)

**Decision Status**

Tracking

Create Resubmission

FFS Letters

Waiver Documentation

**Decision Comments**

Meetings & Milestones FFS Information FFS Negotiated Due Dates 12 OPP Target Due Date

Decision Ownership Receipts Data Package Reduced Risk

Receipts	Staff Member	Reg/DCI Number	Submission Due Dt	Response
S:816029	Stone, James	70506-93	30-Nov-2007	PENDING
Response to Agency letter of 7/27/07				
S:813780	Stone, James	70506-93	30-Nov-2007	PENDING
NA				
S:813410	Stone, James	70506-93	30-Nov-2007	PENDING
NA				

art Joanne Miller - Inbox ... EPA-PRISM Main - Co ... OPPIN Query - Micros ... 9:26 AM

Resub.

Alex Chen  
Dennis



# **MANDAVA ASSOCIATES, LLC**

*CONSULTANTS IN SCIENCE, TECHNOLOGY AND REGULATORY AFFAIRS*

*1730 M STREET, N.W., SUITE 906, WASHINGTON, DC 20036-4549*

*TELEPHONE: (202)-223-1424/1747 · TELEFAX: (202)-223-0141 · E-MAIL: mandava@compuserve.com*

## **HAND DELIVERED**

August 31, 2007

Ms. Joanne I. Miller  
Product Manager (PM 23)  
U.S. Environmental Protection Agency  
Office of Pesticide Programs  
Herbicide Branch  
Registration Division (7505P)  
Room Number 4900  
2777 S. Crystal Drive  
Arlington, VA 22202

**SUBJECT: Clopyralid Technical – Approval of Alternate Source  
Company: United Phosphorus, Inc.  
EPA Reg. No.: 70506-93  
Response to EPA Comments**

Dear Ms. Miller:

This is in response to your July 27, 2007 letter regarding a New Source of Active Ingredient for Clopyralid Technical (EPA Reg. No.: 70506-93) by United Phosphorus, Inc. You requested us to provide the following information:

- 1) Submit a notarized letter on company letter head authorizing N. Bhushan Mandava, Ph.D. to handle all registration matters for the subject product.**
  - a. We understand that Dr. David L. Olson, Director, Regulatory Affairs, United Phosphorus, Inc. has emailed you the letter on August 9, 2007 and we are submitting a copy along with this letter for your ready reference.
- 2) Adding a new unregistered source of active ingredient is subject to data compensation. You must comply with Title 40 Code of Federal Regulations (CFR) Part 152 Subpart E – Procedures to Ensure Protection of Data Submitter's Rights by choosing the Cite-All or the Selective Methods of Support. Submit a Certificate with Respect to Citation of Data (EPA Form 8570-34) and a Data Matrix (EPA Form 8570-27).**

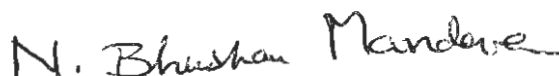
Since we are not aware of this requirement, I discussed it with Mr. James Stone on August 28, 2007 over the telephone. In our opinion, the product is already registered and all issues related to data compensation were addressed and satisfied at the time of registration. For granting the registration for Clopyralid Technical (EPA Reg. No.: 70506-93), the Agency reviewed the product specific data to ensure the quality of the product which met the substantial similarity (or ME-TOO) criteria.

For alternate source (unregistered source), our understanding is that the Agency requires only product chemistry data to compare the quality of the unregistered source product to that of the currently registered source product for Clopyralid Technical (EPA Reg. No. 70506-93). It is also our understanding that the Agency has been approving alternate sources (unregistered sources) for registered products provided that the product quality (purity of the active ingredient and impurity profile) remains the same or substantially similar to that of the registered source(s). We are not aware that the Agency requires the applicants/registrants to comply with 40 CFR Part 152 Subpart E whenever they seek new (alternate) sources. We would appreciate it very much if you would supply us a copy of the guidance document (based on an internal policy statement or a letter from Office of General Counsel) in support of this requirement.

Since the submission is subject to PRIA, we do not want to delay the registration process. Therefore, we are submitting the requested information which includes Certificate with Respect to Citation of Data (EPA Form 8570-34) and a completed Data Matrix (EPA Form 8570-27).

Thank you for your cooperation and understanding.

Sincerely,

A handwritten signature in black ink that reads "N. Bhushan Mandava". The signature is written in a cursive, flowing style.

N. Bhushan Mandava, Ph.D., RAC  
Agent for United Phosphorus, Inc.

Enclosure



## United Phosphorus, Inc.

630 Freedom Business Center, Suite 402  
King of Prussia, PA 19406  
(610) 491-2814 (phone)  
(610) 491-2810 (fax)

August 9, 2007

Joanne Miller, PM #23  
Office of Pesticide Programs  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

SUBJECT: Authorization Letter

Dear Ms. Miller

This letter is to authorize the following party to act on behalf of United Phosphorus Inc. as our agent to represent us before the United States Environmental Protection Agency (EPA) in regards to all matters pertaining to the registration of an alternate source for Clopyralid Technical (EPA Reg. # 70506-93). This authorization is specific to this regulatory action, which was submitted to the Agency on July 9, 2007.

MANDAVA ASSOCIATES, LLC  
1730 M Street, N.W.  
Suite 906  
Washington, DC 20036-4510  
Telephone: (202) 223-1424  
Fax: (202) 223-0141  
E-Mail: [Mandava@compuserve.com](mailto:Mandava@compuserve.com)

Contact Person: N. Bhushan Mandava, Ph.D.

We acknowledge that all correspondence from EPA will be sent to our agent at the address listed above.

This appointment is to remain in effect until revoked by us in writing.

Sincerely,

A handwritten signature in cursive script that reads 'David L. Olson'.

David L. Olson  
Director, Regulatory Affairs  
[dave.olson@uniphos.com](mailto:dave.olson@uniphos.com)



United States  
Environmental Protection Agency  
Washington, DC 20460

☐ Registration  
☐ Amendment  
☒ Other

OPP Identifier Number

## Application for Pesticide - Section I

1. Company/Product Number 70506-93	2. EPA Product Manager Joanne I. Miller	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) United Phosphorus, Inc./Clopyralid Technical	PM# 23	
5. Name and Address of Applicant (Include ZIP Code) United Phosphorus, Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

## Section - II

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input type="checkbox"/> Notification - Explain below.	<input checked="" type="checkbox"/> Other - Explain below.

**Explanation:** Use additional page(s) if necessary. (For section I and Section II.)

The amendment is in response to EPA comments on the registration application for alternate source of Clopyralid Technical (EPA Reg. No. 70506-93). In response to EPA comments, we are submitting the following:

- 1) Certification with Respect to Citation of Data (EPA Form 8570-34)
- 2) Data Matrix (EPA Form 8570-35)
- 3) Please direct all correspondence to: Mandava Associates, LLC; 1730 M Street, NW / Suite 906; Washington, D.C. 20036
- 4) The contact person fax number is (202) 223 - 0141 and e-mail address is: mandava@compuserve.com.

## Section - III

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input checked="" type="checkbox"/> Metal	
* Certification must be submitted				<input type="checkbox"/> Plastic	
	If "Yes" Unit Packaging wgt.	No. per container	If "Yes" Package wgt	<input type="checkbox"/> Glass	
			No. per container	<input type="checkbox"/> Paper	
				<input type="checkbox"/> Other (Specify) _____	
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input checked="" type="checkbox"/>	
6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		<input type="checkbox"/> Other _____			

## Section - IV

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)		
Name N. Bhushan Mandava, Ph.D.	Title Agent for United Phosphorus, Inc.	Telephone No. (Include Area Code) (202) 223-1424
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.		6. Date Application Received (Stamped)
2. Signature N. Bhushan Mandava	3. Title Agent for United Phosphorus, Inc.	
4. Typed Name N. Bhushan Mandava, Ph.D.	5. Date 08/30/07	



**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**  
**401 M Street, S.W.**  
**WASHINGTON, D.C. 20460**

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**Certification with Respect to Citation of Data**

Applicant's/Registrant's Name, Address, and Telephone Number United Phosphorus, Inc. 630 Freedom Center, Suite 402 King of Prussia, PA 19406 (610) 491-2800	EPA Registration Number/File Symbol 70506-93
Active Ingredient(s) and/or representative test compound(s) Clopyralid (CAS# 1702-17-6)	Date August 30, 2007
General Use Pattern(s) (list all those claimed for this product using 40 CFR Part 158) TGA1, MUP	Product Name Clopyralid Technical

**NOTE:** If your product is a 100% repackaging of another purchased EPA-registered product labeled for all the same uses on your label, you do not need to submit this form. You must submit the Formulator's Exemption Statement (EPA Form 8570-27).

☐ I am responding to a Data-Call-In Notice, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).

**SECTION I: METHOD OF DATA SUPPORT** (Check one method only)

☐ I am using the cite-all method of support, and have included with this form a list of companies sent offers of compensation (the Data Matrix form should be used for this purpose).

☒ I am using the selective method of support (or cite-all option under the selective method), and have included with this form a completed list of data requirements (the Data Matrix form must be used).

**SECTION II: GENERAL OFFER TO PAY**

[Required if using the cite-all method or when using the cite-all option under the selective method to satisfy one or more data requirements]

☒ I hereby offer and agree to pay compensation, to other persons, with regard to the approval of this application, to the extent required by FIFRA.

**SECTION III: CERTIFICATION**

I certify that this application for registration, this form for reregistration, or this Data-Call-In response is supported by all data submitted or cited in the application for registration, the form for reregistration, or the Data-Call-In response. In addition, if the cite-all option or cite-all option under the selective method is indicated in Section I, this application is supported by all data in the Agency's files that (1) concern the properties or effects of this product or an identical or substantially similar product, or one or more of the ingredients in this product; and (2) is a type of data that would be required to be submitted under the data requirements in effect on the date of approval of this application if the application sought the initial registration of a product of identical or similar composition and uses.

I certify that for each exclusive use study cited in support of this registration or reregistration, that I am the original data submitter or that I have obtained the written permission of the original data submitter to cite that study.

I certify that for each study cited in support of this registration or reregistration that is not an exclusive use study, either: (a) I am the original data submitter; (b) I have obtained the permission of the original data submitter to use the study in support of this application; (c) all periods of eligibility for compensation have expired for the study; (d) the study is in the public literature; or (e) I have notified in writing the company that submitted the study and have offered (i) to pay compensation to the extent required by sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA; and (ii) to commence negotiations to determine the amount and terms of compensation, if any, to be paid for the use of the study.

I certify that in all instances where an offer of compensation is required, copies of all offers to pay compensation and evidence of their delivery in accordance with sections 3(c)(1)(F) and/or 3(c)(2)(B) of FIFRA are available and will be submitted to the Agency upon request. Should I fail to produce such evidence to the Agency upon request, I understand that the Agency may initiate action to deny, cancel or suspend the registration of my product in conformity with FIFRA.

I certify that the statements I have made on this form and all attachments to it are true, accurate, and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.

Signature <i>N. Bhushan Mandava</i>	Date August 30, 2007	Typed or Printed Name and Title N. Bhushan Mandava, Agent
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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
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WASHINGTON, D.C. 20460

Form Approved OMB No. 2070-0060

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DATA MATRIX

Date August 30, 2007			EPA Reg No./File Symbol 70506-93		Page 1 of 7
Applicant's/Registrant's Name & Address United Phosphorus, Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406			Product Clopyralid Technical		
Ingredient Clopyralid (CAS# 1702-17-6)					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.1550	Product Identity and Composition		United Phosphorus, Inc. 630 Freedom Business	OWN	
			Ctr., Ste 402 King of Prussia, PA 19406		
830.1600	Description of Materials Used to Produce the Product		United Phosphorus, Inc.	OWN	
830.1620	Description of Production Process		United Phosphorus, Inc.	OWN	
830.1650	Description of Formulation Process		United Phosphorus, Inc.	OWN	
830.1670	Discussion of Formation of Impurities		United Phosphorus, Inc.	OWN	
830.1700	Preliminary Analysis		United Phosphorus, Inc.	OWN	
830.1750	Certified Limits		United Phosphorus, Inc.	OWN	
830.1800	Enforcement Analytical Method		United Phosphorus, Inc.	OWN	
830.6302	Color		United Phosphorus, Inc.	OWN	
830.6303	Physical State		United Phosphorus, Inc.	OWN	
830.6304	Odor		United Phosphorus, Inc.	OWN	
830.6313	Stability to Normal & Elevated Temperatures, Metals		United Phosphorus, Inc.	OWN	
	and Metal Ions				
830.6314	Oxidation/Reduction: Chemical Incompatibility		United Phosphorus, Inc.	OWN	
Signature <i>N. Bhushan Mandava</i>			Name and Title N. Bhushan Mandava, Ph.D., Agent - United Phosphorus, Inc.		Date August 30, 2007



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WASHINGTON, D.C. 20460

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DATA MATRIX

Date August 30, 2007			EPA Reg No./File Symbol 70506-93		Page 2 of 7
Applicant's/Registrant's Name & Address United Phosphorus, Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406			Product Clopyralid Technical		
Ingredient Clopyralid (CAS# 1702-17-6)					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.6315	Flammability		United Phosphorus, Inc.		Not Required
830.6316	Explodability		United Phosphorus, Inc.		Not Required
830.6317	Storage Stability		United Phosphorus, Inc.	OWN	
830.6319	Miscibility		United Phosphorus, Inc.	OWN	
830.6320	Corrosion Characteristics		United Phosphorus, Inc.	OWN	
830.6321	Dielectric Breakdown Voltage		United Phosphorus, Inc.	OWN	
830.7000	pH		United Phosphorus, Inc.	OWN	
830.7050	UV/Visible Absorption		United Phosphorus, Inc.	OWN	
830.7100	Viscosity		United Phosphorus, Inc.	OWN	
830.7200	Melting Point/Melting Range		United Phosphorus, Inc.	OWN	
830.7220	Boiling Point/Boiling Range		United Phosphorus, Inc.	OWN	
830.7300	Density/Relative Density/Bulk Density		United Phosphorus, Inc.	OWN	
830.7370	Dissociation Constants in Water		United Phosphorus, Inc.	OWN	
830.7550	Partition Coefficient (n-octanol/water), Shake Flask Method		United Phosphorus, Inc.	OWN	
Signature <i>N. Bhushan Mandava</i>			Name and Title N. Bhushan Mandava, Ph.D., Agent - United Phosphorus, Inc.		Date August 30, 2007

EPA Form 8570-35 (9-97) Electronic and Paper versions available. Submit only Paper version.

Agency Internal Use Copy



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

401 M Street, S.W.  
WASHINGTON, D.C. 20460

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## DATA MATRIX

Date August 30, 2007

EPA Reg No./File Symbol 70506-93

Page 3 of 7

Applicant's/Registrant's Name &amp; Address

United Phosphorus, Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406

Product

Clopyralid Technical

Ingredient Clopyralid (CAS# 1702-17-6)

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
830.7560	Partition Coefficient (n-octanol/water), Generator Column Method		United Phosphorus, Inc.	OWN	
830.7570	Partition Coefficient (n-octanol/water), Estimation by Liquid Chromatography		United Phosphorus, Inc.	OWN	
830.7840	Water Solubility: Column Elution Method; Shake Flask Method		United Phosphorus, Inc.	OWN	
830.7860	Water Solubility, Generator Column Method		United Phosphorus, Inc.	OWN	
830.7950	Vapor Pressure		United Phosphorus, Inc.	OWN	

Signature

Name and Title

N. Bhushan Mandava, Ph.D., Agent - United Phosphorus, Inc.

Date

August 30, 2007





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
401 M Street, S.W.  
WASHINGTON, D.C. 20460

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DATA MATRIX

Date August 30, 2007

EPA Reg No./File Symbol 70506-93

Page 4 of 7

Applicant's/Registrant's Name & Address

United Phosphorus, Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406

Product

Clopyralid Technical

Ingredient Clopyralid (CAS# 1702-17-6)

Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
Acute Toxicity and Generic Data		CITE-ALL	Bayer CropScience, LP	Pay	
			2 T.W. Alexander Drive Research		
			Triangle Park, NC 27709 (Company # 264)		
			Bayer Environmental Science	Pay	
			A Business Group of Bayer CropScience LP		
			P O Box 12014 Research		
			Triangle Park, NC 27709 (Company # 432)		
			Osmose Inc.	Pay	
			980 Ellicott Street		
			Buffalo, NY 14209 (Company # 3008)		
			Bayer Corp. P.O. Box 4913	Pay	
			Kansas City, MO 641200013 (Company # 3125)		
			Cerexagri, Inc.	Pay	
			630 Freedom Business Center, Suite 402		
			King of Prussia, PA 19406 (Company # 4581)		

Signature

*N. Bhushan Mandava*

Name and Title

N. Bhushan Mandava, Ph.D., Agent - United Phosphorus, Inc

Date

August 30, 2007



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
401 M Street, S.W.  
WASHINGTON, D.C. 20460

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DATA MATRIX

Date August 30, 2007			EPA Reg No./File Symbol 70506-93		Page 5 of 7
Applicant's/Registrant's Name & Address United Phosphorus, Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406			Product Clopyralid Technical		
Ingredient Clopyralid (CAS# 1702-17-6)					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
Acute Toxicity and Generic Data		CITE-ALL	Dow Chemical Co., The	Pay	
			1500 East Lake Cook Road		
			Buffalo Grove, IL 60089 (Company # 464)		
			NuFarm Americas Inc.	Pay	
			150 Harvester Drive, Suite 200		
			Burr Ridge, IL 60527 (Company # 228)		
			Lebanon Seaboard Corporation	Pay	
			1600 East Cumberland Street		
			Lebanon, PA 17402 (Company # 961)		
			Loveland Products, Inc.	Pay	
			P.O. Box 1286		
			Greeley, CO 80632 (Company # 34704)		
			NuFarm Limited Agent for: NuFarm Limited	Pay	
			P.O. Box 13439		
			RTP, NC 27709 (Company # 35935)		
Signature <i>N. Bhusan Mandava</i>			Name and Title N. Bhusan Mandava, Ph.D., Agent - United Phosphorus, Inc		Date August 30, 2007



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
401 M Street, S.W.  
WASHINGTON, D.C. 20460

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DATA MATRIX

Date August 30, 2007		EPA Reg No./File Symbol 70506-93		Page 6 of 7	
Applicant's/Registrant's Name & Address United Phosphorus, Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406		Product Clopyralid Technical			
Ingredient Clopyralid (CAS# 1702-17-6)					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
Acute Toxicity and Generic Data		CITE-ALL	Albaugh, INC. Agent for: Albaugh, Inc.	Pay	
			P.O. Box 2127		
			Valdosta, GA 31604 (Company # 42750)		
			Dow AgroSciences, LLC	Pay	
			9330 Zionsville Road 308/2E		
			Indianapolis, IN 46268 (Company # 62719)		
			Spray Drift Task Force	Pay	
			1900 K Street, N.W.		
			Washington, D.C. 20006 (Company # 66607)		
			United Phosphorus, Inc.	Pay	
			423 Riverview Plaza		
			Trenton, NJ 08611 (Company # 70506)		
			NuFarm, Inc.	Pay	
			150 Harvester Drive Suite 200		
			Burr Ridge, IL 60527 (Company # 71368)		
Signature <i>N. Bhushan Mandava</i>			Name and Title N. Bhushan Mandava, Ph.D., Agent - United Phosphorus, Inc		Date August 30, 2007



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
401 M Street, S.W.  
WASHINGTON, D.C. 20460

Form Approved OMB No. 2070-0060

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DATA MATRIX

Date August 30, 2007		EPA Reg No./File Symbol 70506-93		Page 7 of 7	
Applicant's/Registrant's Name & Address United Phosphorus, Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406		Product Clopyralid Technical			
Ingredient Clopyralid (CAS# 1702-17-6)					
Guideline Reference Number	Guideline Study Name	MRID Number	Submitter	Status	Note
Acute Toxicity and Generic Data		CITE-ALL	Outdoor Residential Exposure Task Force, LLC	Pay	
			1350 I Street, N.W.		
			Washington, D.C. 20005 (Company # 71754)		
			Agricultural Reentry Task Force, LLC	Pay	
			1350 I Street, N.W.		
			Washington, D.C. 20005 (Company # 71755)		
			FIFRA Endangered Species Task Force, LLC	Pay	
			1350 I Street, N.W.		
			Washington, D.C. 20005 (Company # 73989)		
			Residential Exposure Joint Venture (REJV)	Pay	
			900 17th Street, NW, Suite 300		
			Washington, D.C. 20006 (Company # 74888)		
			Agricultural Handlers Exposure Task Force	Pay	
			P.O. Box 509		
			Mecon, MO 63552 (Company # 75234)		
Signature <i>N. Bhushan Mandava</i>			Name and Title N. Bhushan Mandava, Ph.D., Agent - United Phosphorus, Inc		Date August 30, 2007

Receipt for Section 3				
S: 813410	Resubmission: <input type="radio"/> Yes <input checked="" type="radio"/> No		<div>Print Letter</div> <div>Enter More Information</div> <div>Tracking</div>	
Regulatory Type: Product Registration - Section 3	Fee For Service: <input checked="" type="radio"/> Yes <input type="radio"/> No			
Application Type: Amendment	Billable: <input checked="" type="radio"/> Yes <input type="radio"/> No			
Company: 70506 UNITED PHOSPHORUS, INC	V			
Risk Manager: Registration Division, Risk Management Team 23				
Product #: 70506-93	Product Name:			
Overide#:				
Me Too Section3:	Me Too Product Name:			
Application Date: 09-Jul-2007	ie	OPP Rec'd Date: 12-Jul-2007	Receipt Content	
Front End Date: 13-Jul-2007	ie	Risk Manager Send Date:		ie
FFS Due Date:		Negotiated Due Date:		
OPP Target Date:				
Fast Track: <input type="checkbox"/>	New Ingredient: <input type="checkbox"/>			
Receipt Description:				
Alternate source for clopyralid technical				
Form A: <input type="checkbox"/>	Signature Date:	Form B: <input type="checkbox"/>	Signature Date:	

Jim

R-34

Receipt for Section 3

S: 813780

Regulatory Type: Product Registration - Section 3

Application Type: Amendment

Company: 70506 UNITED PHOSPHORUS, INC

Risk Manager: Registration Division, Risk Management Team 23

Product #: 70506-93

Product Name: AGVALUE CLOPYRALID TECHNICAL

Me Too Section3:

Me Too Product Name:

Application Date: 23-Jul-2007

Front End Date: 23-Jul-2007

FFS Due Date:

OPP Target Date:

Fast Track:

Receipt Description: resubmission following 86-5 rejection

Form A:

Signature Date:

Resubmission:

Fee For Service:

Billable:

OPP Rec'd Date: 23-Jul-2007

Risk Manager Send Date: 23-Jul-2007

Negotiated Due Date:

New Ingredient:

Request Date:

New Ingredient:

Received Date:

Form B:

Signature Date:

Print Letter

Enter More Information

Tracking

Receipt Content

Study

# **MANDAVA ASSOCIATES, LLC**

CONSULTANTS IN SCIENCE, TECHNOLOGY AND REGULATORY AFFAIRS

1730 M STREET, N.W., SUITE 906, WASHINGTON, DC 20036-4512

TELEPHONE: (202)-223-1424/1747 · TELEFAX: (202)-223-0141 · E-Mail: mandava@compuserve.com

## **HAND DELIVERED**

July 9, 2007

Ms. Joanne I. Miller  
Product Manager 23  
Herbicide Branch  
Registration Division (7505C)  
U.S. Environmental Protection Agency  
Washington, DC 20460

SUBJECT: Alternate Source for CLOPYRALID TECHNICAL  
Active Ingredient: Clopyralid  
EPA Reg. No.: 70506-93

Registrant: United Phosphorus, Inc.

Dear Ms. Miller:

Clopyralid Technical (EPA Reg. No.: 70506-93) is registered by United Phosphorus, Inc. (UPI). According to label ingredient statement, the purity of active ingredient (as clopyralid) is 96% in Clopyralid Technical.

The registrant (UPI) is seeking an alternate source for Clopyralid Technical and the producer for proposed alternate source is United Phosphorus Ltd. We are submitting the following product chemistry data in support of the alternate source for Clopyralid Technical.

- 1) Volume 1: CLOPYRALID TECHNICAL: Group A - Product Identity and Composition and Analysis. Product Properties Data in Support of FIFRA Registration. Data Requirement: 40 CFR § 158.155-180: OPPTS Test Guidelines 830.1000 - 1900; OPP Guideline Series 61 and 62; (Project Number: UPL-CLOPYR-TECH-PC-1); United Phosphorus, Inc.
- 2) Volume 2: Preliminary Analysis of Five Representative Production Batches of Clopyralid Technical Grade Active Ingredient (TGA) to Determine % Clopyralid and to Quantify its Associated Impurities. U.S. EPA OPPTS Test Guidelines 830.1700, 830. 1800 and EU 91/414/EEC, SANCO/3039/99 rev.4; (JRF Study Number: 6587); Jai Research Foundation.

- 3) Volume 2A CLOPYRALID TECHNICAL: Group A - Product Identity and Composition. Product Properties Data in Support of FIFRA Registration. Data Requirement: 40 CFR § 158.155-180; OPPTS Test Guidelines 830.1000 - 1900; OPP Guideline Series 61 and 62; (Project Number: UPL-CLOPYR-TECH-PC-2); United Phosphorus, Inc.
- 4) Volume 3.1 Appearance (Colour, Physical State and Odour) of Clopyralid Technical: Data Requirement: OPPTS Test Guidelines 830.6302, 6303 and 6304; JRF Study Number: 6592; Jai Research Foundation.
- 5) Volume 3.2 pH of Clopyralid Technical: Data Requirement: OPPTS Test Guidelines 830.7000; JRF Study Number: 6593; Jai Research Foundation.
- 6) Volume 3.3 Tap Density of Clopyralid Technical: Data Requirement: Method: CIPAC MT 33; JRF Study Number: 6661; Jai Research Foundation.
- 7) Volume 3A CLOPYRALID TECHNICAL: Group B – Physical and Chemical Properties. Product Properties Data in Support of FIFRA Registration. Data Requirement: 40 CFR §158.190; OPPTS Test Guidelines 830.6302 - 7950; OPP Guideline Series 63; (Project Number: UPL-CLOPYR-TECH-PC-3); United Phosphorus, Inc.

We have enclosed a copy of the approved label for Clopyralid Technical (EPA Reg. No.: 70506-93) and the Confidential Statement of Formula (EPA Form 8570-4) for proposed alternate source product.

Since we unequivocally showed that, based on the product chemistry data, the proposed alternate source for Clopyralid Technical is the same as or substantially similar to the registered Clopyralid Technical (70506-93), we request you to approve the proposed alternate source (alternate formulation). Thank you for your ready cooperation.

Sincerely,



N. Bhushan Mandava, Ph.D., RAC  
Agent for United Phosphorus, Inc.



TRANSMITTAL DOCUMENTNAME AND ADDRESS OF SUBMITTER:

United Phosphorus, Inc.  
630 Freedom Business Center  
Suite 402  
King of Prussia, PA 19406

REGULATORY ACTION SUPPORTED BY THIS PACKAGE:

FIFRA Registration Application for:

Product Name:	Clopyralid Technical
Active Ingredient:	Clopyralid
Company Name:	United Phosphorus, Inc.
EPA Company Number:	70506
EPA File Symbol:	70506-93

TRANSMITTAL DATE:

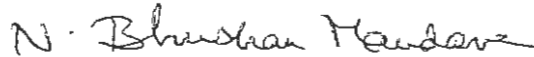
July 9, 2007

LIST OF SUBMITTED STUDIES:

- |          |    |           |  |
|----------|----|-----------|--|
| 47178801 | 1) | Volume 1: | CLOPYRALID TECHNICAL: Group A - Product Identity and Composition and Analysis. Product Properties Data in Support of FIFRA Registration. Data Requirement: 40 CFR § 158.155-180: OPPTS Test Guidelines 830.1000 - 1900; OPP Guideline Series 61 and 62; (Project Number: UPL-CLOPYR-TECH-PC-1); United Phosphorus, Inc.                  |
| 47183401 | 2) | Volume 2: | Preliminary Analysis of Five Representative Production Batches of Clopyralid Technical Grade Active Ingredient (TGAI) to Determine % Clopyralid and to Quantify its Associated Impurities. U.S. EPA OPPTS Test Guidelines 830.1700, 830. 1800 and EU 91/414/EEC, SANCO/3039/99 rev.4; (JRF Study Number: 6587); Jai Research Foundation. |

- 47178803 3) Volume 2A CLOPYRALID TECHNICAL: Group A - Product Identity and Composition. Product Properties Data in Support of FIFRA Registration. Data Requirement: 40 CFR § 158.155-180; OPPTS Test Guidelines 830.1000 - 1900; OPP Guideline Series 61 and 62; (Project Number: UPL-CLOPYR-TECH-PC-2); United Phosphorus, Inc.
- 47178804 4) Volume 3.1 Appearance (Colour, Physical State and Odour) of Clopyralid Technical: Data Requirement: OPPTS Test Guidelines 830.6302, 6303 and 6304; JRF Study Number: 6592; Jai Research Foundation.
- 47178805 5) Volume 3.2 pH of Clopyralid Technical: Data Requirement: OPPTS Test Guidelines 830.7000; JRF Study Number: 6593; Jai Research Foundation.
- 47178806 6) Volume 3.3 Tap Density of Clopyralid Technical: Data Requirement: Method: CIPAC MT 33; JRF Study Number: 6661; Jai Research Foundation.
- 47178807 7) Volume 3A CLOPYRALID TECHNICAL: Group B - Physical and Chemical Properties. Product Properties Data in Support of FIFRA Registration. Data Requirement: 40 CFR § 158.190: OPPTS Test Guidelines 830.6302 - 7950; OPP Guideline Series 63; (Project Number: UPL-CLOPYR-TECH-PC-3); United Phosphorus, Inc.

COMPANY OFFICIAL:



N. Bhushan Mandava, Ph.D., RAC  
Registration Agent for United Phosphorus, Inc.

COMPANY CONTACT:

N. Bhushan Mandava  
Mandava Associates, LLC  
1730 M Street, N.W., Suite 906  
Washington, D.C. 20036  
(202) 223-1424/1747

FAX #



United States  
Environmental Protection Agency  
Washington, DC 20460

☐ Registration  
☐ Amendment  
☒ Other

OPP Identifier Number

**Application for Pesticide - Section I**

1. Company/Product Number 70506-93	2. EPA Product Manager Joanne I. Miller	3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted
4. Company/Product (Name) United Phosphorus, Inc./Clopyralid Technical	PM# 23	
5. Name and Address of Applicant (Include ZIP Code) United Phosphorus, Inc. 630 Freedom Business Center, Suite 402 King of Prussia, PA 19406 <input type="checkbox"/> Check if this is a new address	6. Expedited Review. In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg. No. _____ Product Name _____	

**Section - II**

<input type="checkbox"/> Amendment - Explain below.	<input type="checkbox"/> Final printed labels in response to Agency letter dated _____
<input type="checkbox"/> Resubmission in response to Agency letter dated _____	<input type="checkbox"/> "Me Too" Application.
<input type="checkbox"/> Notification - Explain below.	<input checked="" type="checkbox"/> Other - Explain below.

**Explanation:** Use additional page(s) if necessary. (For section I and Section II.)

- 1) This application is for the approval of alternate source of Clopyralid Technical (EPA Reg. No. 70506-93).
- 2) Submittal of Product Chemistry data on Clopyralid Technical from United Phosphorus, Ltd. which is proposed to be used as the alternate source.
- 3) The action code for this request is R34.
- 4) Please direct all correspondence to: Mandava Associates, LLC; 1730 M Street, NW / Suite 906; Washington, D.C. 20036
- 5) The contact person fax number is (202) 223 - 0141 and e-mail address is: mandava@compuserve.com.

**Section - III**

1. Material This Product Will Be Packaged In:				2. Type of Container	
Child-Resistant Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Water Soluble Packaging <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		<input type="checkbox"/> Metal	
* Certification must be submitted				<input checked="" type="checkbox"/> Plastic	
If "Yes" Unit Packaging wgt. No. per container		If "Yes" Package wgt. No. per container		<input type="checkbox"/> Glass	
				<input type="checkbox"/> Paper	
				<input type="checkbox"/> Other (Specify) _____	
3. Location of Net Contents Information <input checked="" type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container		5. Location of Label Directions <input checked="" type="checkbox"/>	
6. Manner in Which Label is Affixed to Product <input checked="" type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled		<input type="checkbox"/> Other _____			

**Section - IV**

1. Contact Point (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)					
Name N. Bhushan Mandava, Ph.D.		Title Agent for United Phosphorus, Inc.		Telephone No. (Include Area Code) (202) 223-1424	
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.					6. Date Application Received (Stamped)
2. Signature <i>N. Bhushan Mandava</i>		3. Title Agent for United Phosphorus, Inc.			
4. Typed Name N. Bhushan Mandava, Ph.D.		5. Date 07/09/07			



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

July 24, 2007

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

UNITED PHOSPHORUS, INC  
630 FREEDOM BUSINESS CENTER, SUITE 402  
KING OF PRUSSIA, PA 19406-

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your submittal of 23-JUL-07. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your submittal was found to be in full compliance with the standards for submission of data contained in PR Notice 86-5. A copy of your bibliography is enclosed, annotated with Master Record ID's (MRIDs) assigned to each document submitted. Please use these numbers in all future references to these documents. Thank you for your cooperation. If you have any questions concerning this data submission, please raise them with the cognizant Product Manager, to whom the data have been released.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

July 19, 2007

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

UNITED PHOSPHORUS, INC  
630 FREEDOM BUSINESS CENTER, SUITE 402  
KING OF PRUSSIA, PA 19406-

Report of Analysis for Compliance with PR Notice 86-5

Thank you for your submittal of 12-JUL-07. Our staff has completed a preliminary analysis of the material. The results are provided as follows:

Your data submittal was found to be partially in compliance with the standards for submission of data contained in PR Notice 86-5, with the exceptions noted below. A copy of your transmittal bibliography is enclosed, annotated with the Master Record ID's (MRIDs) assigned to each document accepted. Please use these numbers in all future references to these documents.

If deficiencies were found which apply to individual accepted studies, they are listed below following the applicable MRID. Any document which has been assigned a MRID has been accepted under PR Notice 86-5. If any comments related to a MRID appear on this report, they are provided for your information and reference when preparing future submissions. Some individual documents were not acceptable, and all copies are being returned to you for correction for the reasons indicated below.

These rejected studies have been assigned separate identification numbers which are annotated on both the enclosed bibliography and the rejected document labels.

The rejected studies and their deficiencies are described below.

Rejected Study [02]:

\* The following page(s) in this study is/are illegible due to the poor quality of the photocopying: 191.

TRANSMITTAL DOCUMENTNAME AND ADDRESS OF SUBMITTER:

United Phosphorus, Inc.  
 630 Freedom Business Center  
 Suite 402  
 King of Prussia, PA 19406

REGULATORY ACTION SUPPORTED BY THIS PACKAGE:

FIFRA Registration Application for:

Product Name:	Clopyralid Technical
Active Ingredient:	Clopyralid
Company Name:	United Phosphorus, Inc.
EPA Company Number:	70506
EPA File Symbol:	70506-93

TRANSMITTAL DATE:

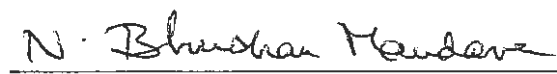
July 9, 2007

LIST OF SUBMITTED STUDIES:

- |                    |    |           |  |
|--------------------|----|-----------|--|
| <b>47178801</b>    | 1) | Volume 1: | CLOPYRALID TECHNICAL: Group A - Product Identity and Composition and Analysis. Product Properties Data in Support of FIFRA Registration. Data Requirement: 40 CFR § 158.155-180: OPPTS Test Guidelines 830.1000 - 1900; OPP Guideline Series 61 and 62; (Project Number: UPL-CLOPYR-TECH-PC-1); United Phosphorus, Inc.                  |
| <b>Reject (02)</b> | 2) | Volume 2: | Preliminary Analysis of Five Representative Production Batches of Clopyralid Technical Grade Active Ingredient (TGAI) to Determine % Clopyralid and to Quantify its Associated Impurities. U.S. EPA OPPTS Test Guidelines 830.1700, 830. 1800 and EU 91/414/EEC, SANCO/3039/99 rev.4; (JRF Study Number: 6587); Jai Research Foundation. |

- 47178803** 3) Volume 2A CLOPYRALID TECHNICAL: Group A - Product Identity and Composition. Product Properties Data in Support of FIFRA Registration. Data Requirement: 40 CFR § 158.155-180; OPPTS Test Guidelines 830.1000 - 1900; OPP Guideline Series 61 and 62; (Project Number: UPL-CLOPYR-TECH-PC-2); United Phosphorus, Inc.
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COMPANY OFFICIAL:

  
\_\_\_\_\_  
N. Bhushan Mandava, Ph.D., RAC  
Registration Agent for United Phosphorus, Inc.

COMPANY CONTACT:

N. Bhushan Mandava  
Mandava Associates, LLC  
1730 M Street, N.W., Suite 906  
Washington, D.C. 20036  
(202) 223-1424/1747

A Jacket Already Exists  
for this Amendment

Please File the Amendment  
in the Jacket

And Check it out  
to the Assigned PM

*Waiting for data  
package.  
SM  
7/18*





UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

July 16, 2007

OFFICE OF  
PREVENTION, PESTICIDES AND  
TOXIC SUBSTANCES

PLEASE RETURN A COPY OF THIS LETTER WITH PAYMENT  
OR PAY ON-LINE at [www.Pay.Gov](http://www.Pay.Gov) (See Below for Details)

OPP Decision Number: D-381191  
EPA File Symbol or Registration Number: 70506-93  
Product Name: Clopyralid Technical  
EPA Receipt Date: 12-Jul-2007  
EPA Company Number: 70506  
Company Name: UNITED PHOSPHORUS, INC

TIMOTHY M. FORMELLA  
UNITED PHOSPHORUS, INC  
630 FREEDOM BUSINESS CENTER, SUITE 402  
KING OF PRUSSIA, PA 19406-

SUBJECT: Receipt of Amendment Subject to Registration Service Fee

Dear Registrant:

The Office of Pesticide Programs has received your application for Amendment. If you submitted data with this application, the results of the PRN-86-5 screen will be communicated separately. During the administrative screen, the Office of Pesticide Programs has determined that this Action is subject to a Pesticide Registration Service Fee as defined in the Pesticide Registration Improvement Act.

The Action has been identified as Action Code: R34

NON-FAST-TRACK (INCLUDES CHANGES TO PRECAUTIONARY LABEL  
STATEMENTS;SOURCE CHANGES TO AN UNREGISTERED SOURCE);

Please remit payment in the amount of: \$ 3,150 to:

By USPS:  
USEPA Washington Finance Center  
Pesticide Registration Service Fee  
PO Box 360277  
Pittsburgh, PA 15251

**By Courier:**

U.S. EPA Washington Finance Center  
Pesticide Registration Service Fee  
C/O Mellon Client Service Center  
500 Ross Street, Room 670  
Box 360277  
Pittsburgh, PA 15251-6277  
Attn: EPA Module Supervisor  
Telephone: (412) 236-2294

All payments must be in United States currency by check, bank draft, or money order drawn to the order of the Environmental Protection Agency. To ensure proper credit, please write the OPP DECISION NUMBER on your check, and enclose a copy of this letter with your payment.

Effective November 1, 2006, fees may be paid on-line via credit card or electronic fund transfer. To submit a payment on-line, visit [www.pay.gov](http://www.pay.gov). From the [pay.gov](http://www.pay.gov) home page, select "search by form name." From the next page, select "P," then click on "Pesticide Registration Improvement Act. Fee Payment" and complete the form, making certain to use the decision number and registration number on the invoice you receive from the Pesticide Program in the space provided.

You may be eligible for a full or partial waiver of the registration service fee if, for example, you qualify as a small business or are applying for a minor use, or if your application is solely associated with an IR-4 tolerance petition. Please be advised that if you intend to request a waiver, you must do so in writing within 15 days of receipt of this invoice instead of remitting the amount indicated above. OPP will not consider waiver requests after the registration service fee has been paid. Information regarding eligibility and how to request and document a fee waiver is available on the OPP Fee for Service web site at [www.epa.gov/pesticides/fees](http://www.epa.gov/pesticides/fees).

Please send Registration Service Fee Waiver requests to:

**By USPS:**

Document Processing Desk (WAIVER)  
Office of Pesticide Programs (7504P)  
U.S. Environmental Protection Agency  
1200 Pennsylvania Ave NW  
Washington, DC 20460

**By Courier:**

Document Processing Desk (WAIVER)  
Office of Pesticide Programs (7504P)  
U.S. Environmental Protection Agency  
Room S-4900 Potomac Yard  
2777 S. Crystal Dr.  
Arlington, VA

A PRIA decision time review period will not start until a fee waiver is granted and/or the Agency receives certification that the outstanding fee has been paid. If the Agency does not receive certification of payment for this action or a fee waiver request within the next 45 days, the Agency will presume that you no longer want to pursue this action. The Agency will then initiate a process that may result in administrative withdrawal of this action.

If you have any questions, please contact the Pesticide Registration Service Fee Ombudsman,

at (703) 305-6249.

Sincerely,

*Teresa Down*

Front End Processing Staff  
Information Technology & Resources Management Division

# Fee for Service

{813410c~

This package includes the following

New Registration

• Amendment

✓ Studies? Fee Waiver?

volpay % Reduction: \_\_\_\_

for Division

AD

BPPD

RD

Risk Mgr. 23

Receipt No.

S-

813410

EPA File Symbol/Reg. No.

70506-93

Pin-Punch Date:

7/9/2007

☐ This item is NOT subject to FFS action.

## Action Code:

Requested:

R34

Granted:

R34

Amount Due: \$ 3,150<sup>20</sup>

## Parent/Child Decisions:

X Inert Cleared for Intended Use <sup>7/16/07</sup> RW 34

Uncleared Inert in Product

Reviewer: J. Miller

Date: 7-16-07

Remarks:

Product chemistry data to support  
alternate source of technical A.I.



United Phosphorus, Inc.

630 Freedom Business Center  
Suite 402  
King of Prussia, PA 19406  
www.uniphos.com

Tu  
Tel: 610-491-2800  
Fax: 610-491-2801

August 16, 2007

Joanne Miller (PM 23)  
Document Processing Desk (FPL)  
Office of Pesticide Programs (7504P)  
U.S. Environmental Protection Agency  
One Potomac Yard  
2777 S. Crystal Drive  
Arlington, VA 22202

Re: Clopyralid Technical (EPA Reg. No. 70506-93)  
Submission of Final Printed Labeling

Dear Ms. Miller:

United Phosphorus, Inc. received approval of an amendment to the subject label in your letter dated Sept. 20, 2005. Since my files do not have record of it, I am sending you a copy of the revised final printed labeling (revisions as required by your letter). This revised label has been neither printed nor released for shipment as of this date.

In addition to the changes you required in 2005, I am also making the following changes: change in company address and contact information, and change in emergency contact information.

Enclosed please find:

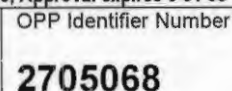
- EPA Form 8570-1
- One copy of the revised label

Please contact me if you have any questions.

Very truly yours,

Rebecca A. Clemmer  
[rebecca.clemmer@uniphos.com](mailto:rebecca.clemmer@uniphos.com)

Form Approved, OMB No. 2070-0060, Approval expires 5-31-98



## Product Name

☐ Other – Explain below

	Other
--	-------

August 16, 2007

(Stamped)

White – EPA File Copy (Original)      Yellow – Applicant Copy

# Clopyralid Technical

## ACTIVE INGREDIENT:

Clopyralid: 3,6-dichloro-2-pyridinecarboxylic acid ..... 96.0%

INERT INGREDIENTS: ..... 4.0%

**TOTAL** ..... 100.0%

## KEEP OUT OF REACH OF CHILDREN DANGER

FIRST AID	
<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly with a steady, gentle stream of water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or physician for treatment advice.</li></ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"><li>• Call a physician or poison control center immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• DO NOT induce vomiting unless told to do so by poison control center or physician.</li><li>• Do not give anything by mouth to an unconscious person.</li></ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably, mouth-to-mouth, if possible.</li><li>• Call a poison control center or physician for treatment advice.</li></ul>
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Wash skin with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or physician for treatment advice.</li></ul>
Note to Physician: Probable mucosal damage may contraindicate the use of gastric lavage. Have the product container or label with you when calling a poison control center or doctor, or going for treatment.	
For chemical emergency: spill, leak, fire, exposure or accident, call CHEMTREC at 1-800-424-9300.	

See side panel for additional precautionary statements.

## Manufactured For:

630 Freedom Business Center, Suite 402  
King of Prussia, PA 19406

1-800-4386071 • [www.upi-usa.com](http://www.upi-usa.com)

EPA Reg. No. 70506-93

EPA Est. No.

Net Weight:

**PRECAUTIONARY STATEMENTS**  
**Hazard to Humans and Domestic Animals**  
**DANGER**

Corrosive. Causes irreversible eye damage. Harmful if absorbed through skin or inhaled. Do not get in eyes or on skin and clothing. Wear goggles or face shield when handling. Avoid breathing dust. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse.

**ENVIRONMENTAL HAZARDS**

Do not discharge effluent containing this product into lakes, streams, ponds, estuaries, oceans, or public waters unless in accordance with the requirements of a National Pollutant Discharge Elimination System (NPDES) permit and the permitting authority has been notified in writing prior to discharge. Do not discharge effluent containing this product to sewer systems without previously notifying the local sewage treatment plant authority. For guidance, contact your State Water Board or Regional Office of the EPA.

**DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

This product may only be formulated into manufacturing-use herbicide products or end-use herbicide products for the following uses:

**Agricultural Uses**

Asparagus, barley, broccoli, broccoli raab, Brussels sprouts, cabbage, canola, cauliflower, Chinese cabbage, Chinese broccoli, collards, corn, fallow land, garden beets, grasses, kale, kohlrabi, mint, mizuna, mustard greens, mustard spinach, oats, pasture, rangeland, rape greens, spinach, stone fruits, sugar beets, tree plantations, turnips, and wheat. This product may be used to formulate products for specific use(s) not listed on this label, except residential turf, if the formulator, user group or grower has complied with U.S. EPA submission requirements regarding the support of such use(s). Consult United Phosphorus, Inc. for instructions for formulation and other information.

**Non-Agricultural Uses**

For manufacture of herbicides for use only on non-residential turf such as athletic and recreational sports fields, cemeteries, golf courses, industrial manufacturing and storage sites, non-cropland, parks, rights-of-way, sod farms and roadsides; grass grown for seed; select ornamental plantings in landscapes and nurseries, forest sites; CRP acres. This product may be used to formulate products for specific use(s) not listed on this label, except residential turf, if the formulator, user group or grower has complied with U.S. EPA submission requirements regarding the support of such uses(s). Consult United Phosphorus, Inc. for instructions for formulation and other information.

This product must not be formulated into manufacturing-use products or end-use products for use on residential turf.

If the product is labeled for reformulation into products bearing labeling for turf applications other than residential turf, the formulated product label must contain the following statements:

- Do not use on residential turf
- Do not send clippings to a compost facility
- Do not collect grass clippings for mulch or compost
- Applicator must give notice to landowners/property managers to not use grass clippings for composting.



## **STORAGE AND DISPOSAL**

Do not contaminate water, food or feed by storage or disposal.

**PESTICIDE STORAGE:** Store in a cool, dry, well-ventilated area.

**PESTICIDE DISPOSAL:** Pesticide wastes are acutely hazardous. Improper disposal of excess pesticide, spray mixture or rinsate is a violation of Federal law. If these wastes cannot be disposed of by use according to label instructions, contact your State Pesticide or Environmental Control Agency, or the Hazardous Waste representative at the nearest EPA Regional Office for guidance.

**CONTAINER DISPOSAL:** Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or by procedures approved by state and local authorities.

## **CONDITIONS OF SALE AND LIMITATION OF WARRANTY AND LIABILITY**

United Phosphorus, Inc. warrants that at the time of delivery, this product will conform to its chemical description on the label, that it is reasonably fit for the purposes referred to in the Directions for use, that it will pass without objection in the trade under the contract description, that the seller will convey title hereto, and that such product will be delivered free from any lawful security interest, lien or encumbrance.

This is the only warranty made on this product. UNITED PHOSPHORUS, INC. EXPRESSLY DISCLAIMS ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND, EXCEPT AS SET FORTH IN THE ABOVE PARAGRAPH, ANY OTHER EXPRESS OR IMPLIED WARRANTIES. BUYER ACKNOWLEDGES THE USE OF ITS OWN INDEPENDENT SKILL AND EXPERTISE IN THE SELECTION AND USE OF THE PRODUCT AND DOES NOT RELY ON ANY ORAL OR WRITTEN STATEMENTS OR REPRESENTATIONS.

Rev. 8/07



**United Phosphorus, Inc.**

630 Freedom Business Center, Suite 402  
King of Prussia, PA 19406  
(610) 491-2814 (phone)  
(610) 491-2810 (fax)

August 9, 2007

Joanne Miller, PM #23  
Office of Pesticide Programs  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, NW  
Washington, DC 20460

SUBJECT: Authorization Letter

Dear Ms. Miller

This letter is to authorize the following party to act on behalf of United Phosphorus Inc. as our agent to represent us before the United States Environmental Protection Agency (EPA) in regards to all matters pertaining to the registration of an alternate source for Clopyralid Technical (EPA Reg. # 70506-93). This authorization is specific to this regulatory action, which was submitted to the Agency on July 9, 2007.

MANDAVA ASSOCIATES, LLC  
1730 M Street, N.W.  
Suite 906  
Washington, DC 20036-4510  
Telephone: (202) 223-1424  
Fax: (202) 223-0141  
E-Mail: [Mandava@compuserve.com](mailto:Mandava@compuserve.com)

Contact Person: N. Bhushan Mandava, Ph.D.

We acknowledge that all correspondence from EPA will be sent to our agent at the address listed above.

This appointment is to remain in effect until revoked by us in writing.

Sincerely,

A handwritten signature in cursive script that reads 'David L. Olson'.

David L. Olson  
Director, Regulatory Affairs  
[dave.olson@uniphos.com](mailto:dave.olson@uniphos.com)



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUL 27 2007

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

United Phosphorus Inc.  
c/o N. Bhushan Mandava Ph.D.  
Mandava Associates, LLC  
1730 M Street NW  
Washington, DC 20036

Gentlemen:

Subject: New Source of Active Ingredient  
Clopyralid Technical  
EPA Registration No. 70506-93

Your application of July 9, 2007 was been found to be incomplete (deficiencies are outlined below). Failure to submit the missing information within 75 days will result in the need to negotiate a new latest completion date for the subject action.

Before we can complete processing of the subject application, you must comply the following:

1. Submit a notarized letter on company letter head authorizing N. Bhushan Mandava Ph.D. to handle all registration matters for the subject product.
2. Adding a new unregistered source of active ingredient is subject to data compensation. You must comply with Title 40 Code of Federal Regulations (CFR) Part 152 Subpart E - Procedures to Ensure Protection of Data Submitter's Rights by choosing the Cite-All or the Selective Methods of Support. Submit a Certificate with Respect to Citation of Data (EPA Form 8570-34) and a Data Matrix (EPA Form 8570-27)

Please submit this missing information to Joanne Miller by:

- 1) E-mail ([Miller.Joanne@epa.gov](mailto:Miller.Joanne@epa.gov))
- 2) Fax (703-308-1825)
- 3) Hand deliver or next day delivery at:

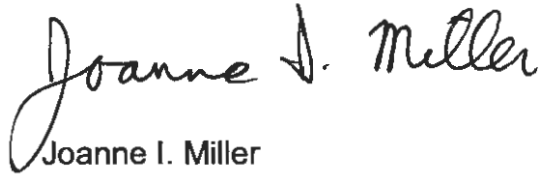
Joanne Miller, Room number 4900  
U.S. EPA  
Registration Division (7505P)  
One Potomac Yard (South Building)  
2777 S. Crystal Drive  
Arlington, VA 22202

-2-

Thank you for your attention to this matter.

If you have any questions concerning this letter please contact Mr. James Stone at 703-305-7391.

Sincerely yours,

A handwritten signature in cursive script that reads "Joanne I. Miller". The signature is written in black ink and is positioned above the printed name and title.

Joanne I. Miller  
Product Manager (23)  
Herbicide Branch  
Registration Division (7505P)

*INPAC*

## Material to be added to a Mini-Jacket (in the case where an e-Jacket exists)

Reg. No. 70506-93

Send to SIG: check box ☐

This material is:

New stamped-accepted label

New CSF

Notification

Final Printed Label

Other: \_\_\_\_\_

**Instructions: Attach this notice on top of the material. It must be clipped all together and there should be NO STAPLES in the material. Then give the material with this coversheet to staff in the Information Services Center (Room 230).**

Reviewer's Name: Jim Stone

Phone: 305-7391 Division: RD

Date: 6/21/06



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C. 20460

JUN 21 2006

OFFICE OF  
PREVENTION, PESTICIDES  
AND TOXIC SUBSTANCES

Rebecca A Clemmer  
United Phosphorus Inc  
423 Riverview Plaza  
Trenton, NJ 08611

Dear Ms. Clemmer:

Subject: Storage Stability and Corrosion Characteristic Studies  
Clopyralid Technical  
EPA Registration No. 70506-93  
Clopyr Ag  
EPA Registration No. 70506-94  
Your Submission Dated April 7, 2006

The subject Storage Stability and Corrosion Characteristic Studies are acceptable.

If you have any questions concerning this letter, please contact Mr. James Stone at 703-305-7391. For your information, enclosed is a copy of the scientific reviews.

Sincerely yours,

A handwritten signature in cursive script that reads "Joanne I. Miller".

Joanne I. Miller  
Product Manager (23)  
Herbicide Branch  
Registration Division (7505P)

Enclosure

**DATE OUT: DATE:** 06/02/06

**SUBJECT: FEE: PRODUCT CHEMISTRY REVIEW OF MP** ☐ **EP** ☒

**DP BARCODE No.:** 328809 **File Symbol No.:** 70506-93

**PRODUCT NAME:** AGVALUE CLOPYRALID TECHNICAL

**COMPANY:** UNITED PHOSPHORUS INC.

**FOOD USE** ☐ **INTEGRATED FORMULATION** ☐

**PCC:** 117403 **Decision No.** 367092

**FROM:**

Indira Gairola, Chemist  
Product Chemistry Team  
Technical Review Branch/RD (7505P)

SB  
6/12/06

**TO:**

Joanne Miller/James Stone PM 23  
Herbicide Branch/RD(7505P)

#### **INTRODUCTION:**

UNITED PHOSPHORUS INC has submitted Storage Stability Data and Corrosion Characteristic study (MRID# 468105-01) for the subject product AGVALUE CLOPYRALID TECHNICAL that contains active ingredient Clopyralid.

#### **SUMMARY OF FINDINGS:**

1. The submitted Storage Stability and Corrosion Characteristics data for the subject product AGVALUE CLOPYRALID TECHNICAL reviewed are for 0, 3, 6, 9 and 12 months at room temperature.
2. The Storage Stability and Corrosion Characteristics study was conducted in accordance with the requirements of U.S. Environmental Protection Agency Good Laboratory Practice 40 CFR § 160, FIFRA.
3. The study was accompanied by Quality Assurance statement 40 CFR § 160.
4. The samples were stored in original containers at warehouse conditions for 12 months at ambient temperatures.
5. The samples were analyzed by HPLC Method with UV detection Zorbax SB-C8, 5µm, 4.6×150mm Column with auto injection and UV detection at 230 nm. Mobile Phase was 55/45/0.04 (v/v/v) Methanol / water/orthophosphoric acid.


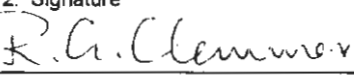
5. Average recovery of active ingredient Clopyralid at the end of 3, 6, 9 & 12 month period ranged from 100.94%-101.85% (Average 101.46%) from an initial of 101.03% at the end of 12 month period. Overall average recovery of the active ingredient in the sample in original containers at ambient temperatures was acceptable.
6. There were no observed changes to the original containers, the containers showed no sign of fogging, discoloration, distortion, or cracking during the course of study under ambient conditions.
8. Appropriate table of recovery with results, chromatograms and calculations are included with this submission.

### **CONCLUSIONS:**

TRB has reviewed the aforementioned Data and concludes:

1. Results of Storage Stability data (830.6317) and Corrosion Characteristics (830.6320) showed acceptable recovery of the active ingredient in the sample.
2. The submitted Storage Stability data and Corrosion Characteristics studies for the subject product AGVALUE CLOPYRALID TECHNICAL completely fulfill the requirements of OPPTS test guidelines 830.6317 and 830.6320 respectively



 <div style="display: inline-block; text-align: center;"> <b>United States</b>  <b>Environmental Protection Agency</b>          Washington, DC 20460       </div>		<input type="checkbox"/> Registration <input type="checkbox"/> Amendment <input checked="" type="checkbox"/> Other	OPP Identifier Number <div style="border: 1px solid black; padding: 5px; text-align: center; font-weight: bold;">274969</div>
<b>Application for Pesticide – Section I</b>			
1. Company/Product Number 70506-94		2. EPA Product Manager J. Miller	
4. Company/Product (Name) United Phosphorus, Inc/Clopyr Ag		3. Proposed Classification <input checked="" type="checkbox"/> None <input type="checkbox"/> Restricted	
5. Name and Address of Applicant (Include ZIP Code) United Phosphorus, Inc. 423 Riverview Plaza Trenton, NJ 08611  <input type="checkbox"/> Check if this is a new address		6. <b>Expedited Review.</b> In accordance with FIFRA Section 3(c)(3) (b)(i), my product is similar or identical in composition and labeling to: EPA Reg No. _____ Product Name _____	
<b>Section - II</b>			
<input type="checkbox"/> Amendment – Explain below  <input type="checkbox"/> Resubmission in response to Agency letter dated _____  <input type="checkbox"/> Notification – Explain below		<input type="checkbox"/> Final printed labels in response to Agency letter dated _____ <input type="checkbox"/> "Me Too" Application  <input checked="" type="checkbox"/> Other – Explain below	
<b>Explanation:</b> Use additional page(s) if necessary. (For Section I and Section II.) Submission of storage stability and corrosion characteristics testing in response to EPA Notice of Pesticide Registration dated 5/6/03.			
<b>Section III</b>			
1. Material This Product Will be Packaged in:			
Child-Resistant Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No	Unit Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No If "Yes" Unit Packaging wgt. _____	Water Soluble Packaging <input type="checkbox"/> Yes <input type="checkbox"/> No If "Yes" Package wgt _____	2. Type of Container <input type="checkbox"/> Metal <input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Paper <input type="checkbox"/> Other (Specify) _____
3. Location of Net Contents Information <input type="checkbox"/> Label <input type="checkbox"/> Container		4. Size(s) Retail Container <input type="checkbox"/> Lithograph <input type="checkbox"/> Paper glued <input type="checkbox"/> Stenciled	5. Location of label directions <input type="checkbox"/> On Label <input type="checkbox"/> On Label accompanying product
6. Manner in Which Label is Affixed to Product		<input type="checkbox"/> Other _____	
<b>Section IV</b>			
1. Contact Person (Complete items directly below for identification of individual to be contacted, if necessary, to process this application.)			
Name Rebecca A. Clemmer		Title Regulatory Affairs Manager	Telephone No. (Include Area Code) 609-392-8200
<b>Certification</b> I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law.			6. Date Application Received  <div style="border: 1px solid black; padding: 10px; font-weight: bold;">(Stamped)</div>
2. Signature 		3. Title Regulatory Affairs Manager	
4. Typed Name Rebecca A. Clemmer		5. Date April 7, 2006	

**United Phosphorus, Inc.**

423 Riverview Plaza  
Trenton, NJ 08611  
(609) 392-8200 x 1018 (phone)  
(609) 392-0073 (fax)

Rebecca A. Clemmer  
Regulatory Affairs Manager

April 7, 2006

Joanne Miller (PM 23)  
Document Processing Desk  
Office of Pesticide Programs (7504C)  
U.S. Environmental Protection Agency  
1801 Bell Street  
Arlington, VA 22202

Re: Submission of Storage Stability Studies  
Clopyralid Technical (EPA Reg. No. 70506-93)  
Clopyr Ag (EPA Reg. No. 70506-94)

Dear Ms. Miller:

Enclosed please find the following studies, which were required as a condition of registration:

- 46810501** Clopyralid Technical, Storage Stability and Corrosion Characteristics. OPP Guidelines 830.6317 and 830.6320. Jai Research Foundation, March 10, 2006. Study No. 15937.
- 46810502** Clopyr Ag, Storage Stability and Corrosion Characteristics. OPP Guidelines 830.6317 and 830.6320. Jai Research Foundation, March 10, 2006. Study No. 15888.

Please contact me if you have any questions.

Very truly yours,

Rebecca A. Clemmer  
[rclemmer@upi-usa.com](mailto:rclemmer@upi-usa.com)

